

IO19526-001



Dan Peacock/DC/USEPA/US  
04/17/2008 03:51 PM

To Jim Goodyear/DC/USEPA/US@EPA  
cc Nicholas Mastrota/DC/USEPA/US@EPA  
bcc

Subject Fw: Oregon: Zinc Phosphide issues, more dead geese

History: This message has been replied to and forwarded.

Jim,

Please put this report in the incident database

Thank You,

Daniel B. Peacock, Biologist  
Tel: 703-305-5407  
Fax: 703-305-6920  
E-Mail: peacock.dan@epa.gov

Addresses:  
United States Postal Service (USPS): USEPA, Insecticide-Rodenticide Branch, Registration Division  
(7504P), 1200 Pennsylvania Ave. NW, Washington, DC 20460-0001

Courier Deliveries: USEPA, Insecticide-Rodenticide Branch, Registration Division, Room S-4900, One  
Potomac Yard, 2777 Crystal Drive, Arlington, VA 22202

— Forwarded by Dan Peacock/DC/USEPA/US on 04/17/2008 03:50 PM —



Rose Kachadoorian  
<rkachado@oda.state.or.us>  
04/16/2008 01:40 PM

To Bill Jacobs/DC/USEPA/US@EPA, Dan  
Peacock/DC/USEPA/US@EPA  
cc

Subject Oregon: Zinc Phosphide issues, more dead geese

On Tuesday (4/8/08), I mailed revised zinc phosphide grass grown for seed labels to EPA. We mailed these to EPA after we met with Brad Bales (mentioned in the article below) on Monday. As with previous labels, applications could not begin until May 1. Unfortunately, on Thursday 60 dead geese were found (we had a brief period of dry weather; it has been raining almost everyday). USFWS and ODFW think that zinc phosphide might be responsible and the birds have been sent to Madison, WI. Some of the birds are at our lab.

We do not know if exposure is from legal applications (which there are many that could have occurred), or from an over zealous grass seed grower making an illegal application. USFWS criminal is investing.

Staats Lake (site of the dead geese) is near a golf course, industrial land and some ag land. Pesticide sales records are being collected, and interviews conducted. I had been telling USFWS and ODFW that there were not any above-ground uses of zinc

provided by  
Nick Mastrota, EFED  
to ISB 4/28/08

phosphide on golf courses, but then had to retract what I had been telling them because of EPA Reg.No. 4217-16 (attached). This label unlike any other (that I am aware of), allows broadcast use (including aerial) on Noncrop areas including right-of-ways, lawns, parks, nurseries, and golf courses. The label is also a bit confusing since it states, "This bait may NOT be applied on roads, near residential areas, or over water. Do not broadcast over growing crops." But then provides directions for use on lawns and nurseries (a growing crop).

I thought you might want to know about these potential geese deaths. I will keep you updated and let you know the test results.

Despite these recent deaths, there is much stronger support from wildlife officials for the use of zinc phosphide in grass grown for seed, than any products which may potentially affect raptors.

Rose



4271-16.pdf <http://www.statesmanjournal.com/apps/pbcs.dll/article?AID=2008804150341>

April 15, 2008

## Keizer lake's dead geese raise alarm

Wildlife officials hope federal lab finds explanation

*By Alan Gustafson*

*Statesman Journal*

Large numbers of Canada cackling geese keep dying at Staats Lake in Keizer. It's a mysterious trend that alarms some people who live near the private lake and hate to see the waterfowl sanctuary become a graveyard.

"We feel kind of like it's the canary in the coal mine," Keizer resident Debbie Lowery said. "It's a sign to me that something in our ecosystem is not quite right."

About 60 dead geese were recovered at the lake from Friday through Monday, said Brad Bales, the migratory game bird coordinator for the Oregon Department of Fish and Wildlife.

Laboratory testing of goose carcasses will be done at the National Wildlife Health Center in Madison, Wis. Results from the federal lab should be known within 10 days, Bales said Monday.

Newspaper reports indicate that large die-offs of geese previously occurred at Staats Lake in 2007, 2005, 2001 and 2000.

Bales said the lake itself doesn't appear to be the culprit. Previous investigations linked bird fatalities to aspergillosis, a fungal infection of the lungs, and to pesticide contamination, he said.

"In the past, it has not been anything directly related to Staats Lake," he said. "It's just that it's a heavy goose-roosting area. They may be sick when they get there and that's just where they seem to perish."

Investigators who looked into the earlier cases stopped short of determining where the geese may have ingested lethal amounts of pesticide, Bales said.

"We never really tracked down the exact source, so we don't know where the contamination might have occurred," he said.

Canada cackling geese nest in western Alaska and venture into the Willamette Valley during the winter season. They fly and roost in large flocks, often comprising several thousands of birds.

Lise Payne said she was stunned to come across dozens of dead geese Friday morning as she took her customary walk around the 60-acre lake.

"There were almost 40 birds dead," she said. "I mean, they were just lying side by side."

Payne, who moved with her husband to Keizer from Hawaii in October, said she long will remember the sight of the dead geese, and she's intensely curious about what killed them.

"It's heartbreaking," she said. "I'm still upset. Oregon is supposed to be such a green state."

Lowery, who has lived near Staats Lake for five years, said it's hard to fathom why the prime bird-watching setting has become a recurring place for geese to die.

"Maybe it's a cemetery lake, I don't know," she said. "Why they all flock to our lake to die is kind of weird."

The Keizer case could take on more significance if large numbers of geese turn up dead at other roosting places in the Willamette Valley, Bales said.

"There are a lot of things out there that birds can die of," he said. "We're just concerned about how widespread it is. If this is happening on a big scale, affecting a lot of areas, hopefully we'll be getting that information and be able to kind of pinpoint it a little better."

[agustafs@StatesmanJournal.com](mailto:agustafs@StatesmanJournal.com) or (503) 399-6709



April 15, 2008

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Statesman Journal*

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*agustafs@StatesmanJournal.com or (503) 399-6709*

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4271-16

12/10/2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

December 10, 2003

R & M Exterminators, Inc.  
c/o Regulatory Services Inc.  
17220 Westview Road  
Lake Oswego, OR 97034

300  
17

5-746140

Attention: Ms. Irene Boone

<b>Subject</b>	<b>Zinc Phosphide on Oats EPA Reg. No. 4271-16 Proposed Revised Label Your amended application of September 27, 2003</b>
<b>Purpose</b>	The purpose of your submission is to revise your label in response to a July 24, 2003, request from the California Department of Pesticide Regulation.
<b>Review of label</b>	The labeling submitted with the above letter, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is acceptable, provided you submit one (1) copy of final printed labeling to us before you ship your product. A copy of the stamped label is enclosed for your records.
<b>Existing stocks</b>	Stocks of existing labels may be used for eighteen (18) months.
<b>Consequence for non-compliance</b>	If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of this condition.

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**Questions** If you have questions about this letter, please contact me at 703-305-5407 (by phone), 703-305-6596 (by fax), or peacock.dan@epa.gov (by E-Mail).

Sincerely yours,



Daniel B. Peacock, Biologist  
Insecticide-Rodenticide Branch  
Registration Division (7504C)

**Enclosure** 1. Stamped label  
2. Minimum Type Sizes for Final Printed Labels

**Letter location** Disk 133:A:\Zinc Phosphide-Final\4271-16, revised label, 12-10-2003.wpd,

DRAFT FRONT PANEL (Rev. 8-03)

**RESTRICTED USE PESTICIDE  
DUE TO HAZARD TO NONTARGET ORGANISMS**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicators certification.

**ZINC PHOSPHIDE  
ON OATS**

For Control of voles (*Microtus* spp.) and deer mice (*Peromyscus* spp.) in orchards, groves, conifer and hardwood seedling plantations, noncrop areas, grape vineyards, macadamia nut orchards and sugarcane. For control of pocket gophers in rangelands, croplands, Christmas tree plantations and non-crop areas.

ACTIVE INGREDIENT: Zinc Phosphide.....2.00%  
INACTIVE INGREDIENTS:.....98.00%  
TOTAL.....100.00%

**ACCEPTED**

DEC 10 2003

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 4271-16

**KEEP OUT OF REACH OF CHILDREN****CAUTION**

See side panel for additional precautionary statements.

**FIRST AID**

Have label with you when obtaining treatment advice.

Any person applying zinc phosphide products and experiencing signs and symptoms such as nausea, abdominal pain, tightness in the chest, or weakness, should be seen by a physician immediately.

- |                        |                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| If swallowed           | <ul style="list-style-type: none"> <li>-Call a poison control center or doctor immediately for treatment advice or transport the patient to the nearest hospital.</li> <li>-Do not drink water.</li> <li>-Do not administer anything by mouth.</li> <li>-Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul> |
| If on skin or clothing | <ul style="list-style-type: none"> <li>-Take off contaminated clothing.</li> <li>-Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>-Call poison control center or doctor immediately for treatment advice.</li> </ul>                                                                                                            |
| If inhaled             | <ul style="list-style-type: none"> <li>-Move person to fresh air.</li> <li>-If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>                                                                                                                                         |
| If in eyes             | <ul style="list-style-type: none"> <li>-Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>-Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>-Call a poison control center or doctor immediately for treatment advice.</li> </ul>                                        |

For information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Network at 1-800-858-7378.

Manufactured by: R & M Exterminators, Inc.  
24212 South "D" Street  
Cheney, WA 99004

EPA Reg. No. 4271-16  
EPA Est. No. 4271-WA-1

NET CONTENTS 25 LBS.



**PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION.** Harmful if swallowed, absorbed through the skin, in eyes or inhaled. Keep away from humans, domestic animals and pets. Avoid eye or skin contact. Do not breathe dust. Avoid contamination of feed or foodstuffs. Prevent contact of bait with acids.

**Personal Protective Equipment**

All handlers, including loaders and applicators, must wear:

- long sleeve shirt and long pants,
- shoes plus socks, and
- gloves

In addition, persons loading the baits into aircraft or mechanical ground equipment and persons loading/applying with a hand-pushed or hand-held equipment, such as push-type spreader or cyclone spreader, must wear:

- dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) and protective eyewear.

Any person who retrieves carcasses or unused bait following application of this product must wear:

- gloves.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Control Statements**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing

**ENVIRONMENTAL HAZARDS**

This product is toxic to wildlife and fish. Birds and other wildlife feeding in treated area may be killed. Dogs and other predatory and scavenging mammals might be poisoned if they feed upon animals that have eaten this bait. Use with care when applying in areas frequented by wildlife or adjacent to any body of water. Do not apply directly to water, or to areas where surface water is present or to intertidal area below the mean high water mark. This product shall not be applied over bodies of water, in areas inhabited by livestock or where a hazard exists to rare or endangered species. Do not contaminate water when disposing of equipment wash water or rinsate.

**ENDANGERED SPECIES CONSIDERATIONS**

**NOTICE:** It is a Federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. The use of this product may pose a hazard to Federally-designated endangered/threatened species. Suggested measures to protect endangered species in your county may exist in an EPA "Interim Measures" pamphlet. You may call EPA's Endangered Species Hotline, 1-800-447-3813, to find out if an "Interim Measures" pamphlet exists for your county and have one sent to you. You can also consult your local county extension office or pesticide lead agency to determine whether they have imposed any requirements in your area to protect endangered and threatened species.

**Whooping Crane**(*Grus americana*) Do not use this product 30 days prior to arrival and 30 days after the whooping crane leaves its known critical habitat.

**Attwater's Greater Prairie Chicken**(*Tympanuchus cupido attwateri*) Do not use this product in critical habitat of the Attwater's greater prairie chicken in the following Texas counties: Aransas, Austin, Brazoria, Colorado, DeWitt, Ft. Bend, Galveston, Goliad, Hays, Refugio, Victoria, Waller and Wharton.

**Yellow-Shouldered Blackbird** (*Agelaius xanthomus*) and **Puerto Rican Plain Pigeon** (*Columba inornata wetmorei*) Do not use in critical habitat except in tamper-proof bait boxes; within 6.3 miles of Central Aquirre, Lago Cidra, Ceiba, San German; 9.4 miles of La Esperanza; south of Highway 2 from city of Mayaguez to the city of Ponce, and all of Mona Island, Puerto Rico  
**Utah Prairie Dog** (*Cynomys parvidens*) Do not use this product in critical habitat of the Utah prairie dog (Utah).

**Salt Marsh Harvest Mouse** (*Reithrodontomys raviventris*) Do not use this product in critical habitat within 0.5 miles of salt marsh vegetation and/or brackish water wetlands which are located: 1) near or adjacent to San Pablo Bay and San Francisco Bay, or 2) in the Sacramento River below or adjacent to the confluence of the Sacramento River and the San Joaquin River (California).

**Morro Bay Kangaroo Rat** (*Dipodomys heermanni morroensis*) Do not use this product in critical habitat within 2.5 miles of Baywood Park which is located on Morro Bay (California).

**Aleutian Canada Goose** (*Branta canadensis leucopareia*) Do not use this product from October to March in the federally closed goose hunting areas in the State of California. See current duck and goose hunting game laws for current map.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal

**STORAGE:** Store only in original container, in a dry, cool place inaccessible to children, pets and domestic animals.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spilled bait, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Completely empty by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of bags in a sanitary landfill or by incineration if allowed by State and local authorities.

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Right Side Panel

#### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

##### General Use Restrictions:

- Only apply this product by methods specified on this label.
- Do not apply this product in a way that will contact workers or other persons, either directly or through drift.
- Only handlers may be in the area during application.
- Keep all other persons out of the treated area during application.
- Wear rubber gloves while handling this product.
- Use proper scooping device for bait placement, broadcasting, or mixing. Do not use scooping device for any other purpose.

##### General Warnings and Limitations:

This bait may NOT be applied on roads, near residential areas, or over water. Do NOT broadcast over growing crops. Apply bait on warm, clear days. Do not graze animals in treated areas. Do not apply to bare ground and areas in which no vegetation occurs. Check for and dispose of excess or spoiled bait and carcasses daily until the baits are expended or are removed.

#### ORCHARDS AND GROVES

**USE RESTRICTIONS:** For control of meadow and pine voles (*Microtus spp.*) and deer mice (*Peromyscus spp.*) in orchards and groves. Apply bait after harvest or anytime during the dormant season, but before tree growth begins in the spring. Do not apply on bare ground or growing crops. Wear rubber gloves when handling bait. Do not broadcast over non-orchard/non-grove crops. Do not graze animals on treated areas.

##### APPLICATION DIRECTIONS:

**TRAILBUILDER:** Drop teaspoonful quantities of bait at 4-5 foot intervals in the artificial trail made by the machine just inside the drip line on both sides of the trees. Apply at the rate of 2-3 pounds per acre.

**AERIAL APPLICATION:** Broadcast bait at a rate of 6-10 pounds per acre or make 2 applications of 5 lbs. each per acre.

**HAND BAITING:** Near the base of each infested tree, place teaspoonful quantities of baits 2-4 locations, either on surface or at the mouth of holes leading to underground burrow systems. Cover bait artificially (e.g. mats, boards) or by pulling overhanging grass back into place. Do not disturb the runway system. Bait at the rate of 3-5 pounds per acre of infested trees.

**BROADCAST BAITING:** Under infested trees, broadcast evenly by cyclone seeder or by hand. Place tablespoon amounts into heavy cover along tree rows, rock outcrops, and fence lines. Apply at the rate of 6-10 pounds per acre.

#### CONIFER AND HARDWOOD SEEDLING PLANTATIONS

**USE RESTRICTIONS:** For control of meadow, prairie, and pine voles (*Microtus spp.*), and deer mice (*Peromyscus spp.*) in conifer and hardwood seedling plantations. Treatment at the rate of 5.5-9.0 lbs. per acre should occur in the fall before the seed fall of seeding efforts. Treatment may be necessary in spring to protect emergent seedlings. Do not apply in the areas where plants are being grown for food or feed or in areas inhabited by livestock.

**BAITING:** For hand baiting, place a teaspoonful of bait at surface runways or in burrow entrances. If a trail builder is used, apply at the rate of one teaspoonful of bait 4-5 foot intervals. For broadcast baiting, apply in 20 foot swaths evenly by hand or with a cyclone seeder. For aenal application, broadcast bait at the rate of 5.5-9.0 pounds per acre.

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#### PRAIRIE DOGS

**USE RESTRICTIONS:** For control of Black-tailed prairie dogs (*Cynomys ludovicianus*), White-tailed prairie dogs (*C. leucurus*), and Gunnison's prairie dogs (*C. gunnisoni*) in Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah and Wyoming on rangeland and reforestation seedlings and plantings. **PREBAITING:** To increase acceptance of treated bait by prairie dogs, prebait with one teaspoon of untreated oat groats per mound, one or two days prior to using toxic bait.

**BAITING:** After all or most of the prebait has been eaten, apply bait only to areas where prebait was consumed. Apply bait by hand as a six-inch bait spot on edge of each mound or in adjacent feeding area. Apply at the rate of one teaspoon per bait spot, during late summer or fall (July-December). Do not apply more than once during this period. Dispose of spilled or unwanted bait by burial.

#### GROUND SQUIRRELS

**USE RESTRICTIONS:** For control of Columbian (*Spermophilus columbianus*) and Richardson's (*S. richardsoni*) ground squirrels, on rangeland.

**PREBAITING:** To increase acceptance of treated bait by Columbian and Richardson's ground squirrels, prebait with one teaspoon untreated oat groats as a six-inch bait spot on edge of each mound or in adjacent feeding area.

**BAITING:** Apply bait by hand as a six-inch bait spot on edge of mound or in adjacent feeding area. Apply at the rate of one teaspoon per bait spot.

#### NONCROP AREAS

**USE RESTRICTIONS:** For control of meadow, prairie, and pine voles (*Microtus spp*) and deer mice (*Peromyscus spp.*) in noncrop areas including right-of-ways, lawns, parks, nurseries, and golf courses when damage or heavy mouse infestations occur. Prebaiting with 3-5 pounds per acre of untreated oats 2-3 days before applying toxic bait may provide more consistent toxic bait acceptance.

#### APPLICATION DIRECTIONS:

**HAND BAITING:** Place teaspoonful quantities of bait, either in surface runways or at mouth of holes leading to underground burrow systems. Bait at the rate of 3-5 pounds per acre in infested areas.

**TRAILBUILDER:** Apply teaspoonful quantities of bait 4-5 foot intervals in the artificial runways around infested areas.

**BROADCAST BAITING:** Apply evenly by cyclone seeder or by hand at the rate of 3-5 pounds per acre.

**AERIAL APPLICATION (HELICOPTER):** Make either a single application of 10 pounds per acre or make one 5 pounds per acre application followed two weeks later by a second 5 pounds per acre application.

#### GRAPE VINEYARDS

**USE RESTRICTIONS:** For control of meadow, prairie, and pine voles (*Microtus spp.*), deer mice (*Peromyscus spp*) and meadow jumping mice (*Zapus spp.*) Do not broadcast bait over growing crops when bait may lodge on the plant. Do not apply to bare ground.

#### APPLICATION DIRECTIONS:

**BROADCAST BAITING:** Apply evenly by cyclone seeder or by hand between the rows at a rate of 6-10 pounds per acre.

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**MACADAMIA NUT ORCHARDS****USE RESTRICTIONS:** For control of roof rats (*Rattus rattus*).**APPLICATION DIRECTIONS:****SPOT TREATMENT:** Baits may be placed in bait stations or in stations in trees. Place 1-2 teaspoonful quantities of bait in bait stations at the base of trees or in trees. Uneaten bait must be removed from trees prior to shaker harvest or from ground prior to mechanized harvest. Orchards may be treated up to 30 days prior to harvesting.**BURROW TREATMENT:** Place 1-2 teaspoonful quantities of bait in each burrow. No preharvest interval is required, provided nuts are not retrieved from burrows.**BROADCAST BAITING:** Apply evenly by cyclone seeder or by hand at the rate of 5 pounds per acre. Aircraft may be used to treat adjacent noncrop areas if recommended and supervised by the Hawaii Dept. of Health. The number of applications shall not exceed 4 per year. The total amount of bait applied shall not exceed 20 lbs./acre-year.**SUGARCANE****USE RESTRICTIONS:** For control of Polynesian (*Rattus exulans*), Norway (*R. norvegicus*), Rice (*Oryzomys palustris*), Florida water (*Neofiber alleni*), Cotton (*Sigmodon hispidus*) and Roof Rats (*R. rattus*) in sugarcane fields. Do not apply within 30 days of harvest. Do not apply to adjacent non-crop areas. The number of applications shall not exceed 4 per year. The total amount of bait applied shall not exceed 20 lbs./acre-year.**APPLICATION DIRECTIONS:****PRE-BAITING:** To increase acceptance of treated bait by rats, broadcast 3 pounds untreated oat groats per acre one or two weeks prior to using toxic bait.**BROADCAST BAITING:** Apply 5 pounds of bait per acre per treatment. Bait may be broadcast by aircraft, ground driven equipment or by hand (wear rubber gloves during hand baiting).**RANGELAND, CROPLAND, CHRISTMAS TREE PLANTATIONS, LAWNS, GOLF COURSES, AND OTHER NONCROP AREA****USE RESTRICTIONS:** For control of pocket gophers (*Geomys spp.*, *Thomomys spp.*, or *Pappogeomys spp.*) in rangeland, cropland, Christmas tree plantations, lawns, golf courses, and other noncrop areas. Bait must be applied directly into underground burrow systems. Do not broadcast bait or apply it above ground in any way.**BAITING DIRECTIONS:****HAND BAITING:** Bait must be placed into pocket gopher runways. Remove burrow plug from the flat side of the burrow fan. Using a long-handled spoon, insert one teaspoon of bait into the main runway system. Carefully cover the hole with sod, a rock, or soil to exclude light. Take care not to cover bait with soil. Place bait at 2-5 locations per burrow system. Recover and bury all spilled bait.**BURROW BUILDER:** When treating extensive area, burrow builder method may be used. Follow manufacturer's instructions for the equipment used to apply gopher bait. Make sure that machine-built burrows intersect pocket gopher burrows at the depth at which gophers have been tunneling. For greater efficiency of treatment, machine-built burrows should intersect as many gopher tunnels as possible at right angles. Apply bait at a rate of 1-2 pounds per acre, using a 20' to 30' row spacing interval. Apply only when soil condition is proper to insure formation of a good artificial burrow. Recover and bury all spilled bait.

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**WARRANTY**

Seller warrants that this product conforms to the chemical description on the label and is reasonable for the purposes referred to in the directions for use. Seller makes no other warranties, express or implied, including FITNESS or MERCHANTABILITY. In no case shall the seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by the Seller and is acceptable as such by the buyer.

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Dan Peacock/DC/USEPA/US

04/28/2008 08:12 AM

To Jim Goodyear/DC/USEPA/US@EPA

cc Nicholas Mastrota/DC/USEPA/US@EPA

bcc

Subject Fw: Geese:Results of analysis

FYI,

Thank You,

Daniel B. Peacock, Biologist

Tel: 703-305-5407

Fax: 703-305-6920

E-Mail: peacock.dan@epa.gov

Addresses:

United States Postal Service (USPS): USEPA, Insecticide-Rodenticide Branch, Registration Division (7504P), 1200 Pennsylvania Ave. NW, Washington, DC 20460-0001

Courier Deliveries: USEPA, Insecticide-Rodenticide Branch, Registration Division, Room S-4900, One Potomac Yard, 2777 Crystal Drive, Arlington, VA 22202

----- Forwarded by Dan Peacock/DC/USEPA/US on 04/28/2008 08:11 AM -----



Rose Kachadoorian

<rkachado@oda.state.or.us>

04/18/2008 07:56 PM

To Dan Peacock/DC/USEPA/US@EPA, Bill

Jacobs/DC/USEPA/US@EPA

cc

Subject Geese:Results of analysis

The geese are positive for Zinc Phosphide. USFWS will be putting out a press release. I will send it to you.

Rose



Dan Peacock/DC/USEPA/US

04/28/2008 08:38 AM

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cc

bcc

Subject Fw: Final ODF&W geese news release - Zinc Phosphide

FYI,

Thank You,

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----- Forwarded by Dan Peacock/DC/USEPA/US on 04/28/2008 08:36 AM -----



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04/22/2008 01:21 PM

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cc Dan Peacock/DC/USEPA/US@EPA, Bill  
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Subject Final ODF&W geese news release - Zinc Phosphide

I have attached the same article in two different formats (doc and pdf). This topic was discussed on public radio this morning.

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080421 final dead geese doc Final dead geese pdf



# NEWS RELEASE



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**For Immediate Release**

**April 21, 2008**

## **Dead geese test positive for rodenticide**

**SALEM, Ore.** – Five of six samples taken from geese that died at Staats Lake in Keizer (Marion Co.) are positive for the rodenticide zinc phosphide, according to results from Michigan State University's Center for Integrative Toxicology.

Since the first dead geese were collected at Staats Lake on April 11, a total of 67 dead geese have been found. ODFW staff are monitoring the lake almost daily but no dead geese have been found since April 16.

Regulations on zinc phosphide's use are in place to protect wildlife, though it is not clear if misuse of a pesticide product occurred. Zinc phosphide is allowed for use on golf courses and for such crops as wheat, grass grown for seed, nursery products, and berries. The Oregon Department of Agriculture has implemented Special Local Needs Labels (SLNs) that require below ground application on zinc phosphide on grass grown for seed from September 1 through April 30. All pesticide product users are required to take precautionary measures year-round to prevent impacts on wildlife.

The Oregon Department of Agriculture, the Oregon Department of Fish and Wildlife and U.S. Fish and Wildlife Service have been actively investigating the incident since it was first reported. ODA is working with local pesticide dealers to identify recent purchasers of products containing zinc phosphide, which is a Restricted Use Pesticide only for sale to licensed applicators. By interviewing recent purchasers, ODA is attempting to specifically determine how and where these pesticide products have been applied in the vicinity. If ODA identifies an unlawful use, the agency will proceed to take enforcement action.

Zinc phosphide is used to control small rodents such as voles, mice and ground squirrels, particularly in grass fields where such rodents can cause significant damage to crops. It is highly toxic to rodents, birds, fish and other wildlife, although it is not believed to be hazardous to birds of prey that eat rodents that have been killed by it. When zinc phosphide is ingested it is converted by stomach acids to phosphine gas, which acts on the heart, kidney and liver; death occurs

from heart and kidney failure. Death usually occurs within 15 minutes to four hours after ingestion of a toxic dose.

Geese, whether resident or migratory, are protected under the federal Migratory Bird Treaty Act. Anyone who finds dead geese or has information on the illegal use of zinc phosphide should contact the Oregon Dept. of Agriculture at (503) 986-4635 or the U.S. Fish and Wildlife Service's law enforcement office in Wilsonville, 503-682-6131.

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## Geese deaths in Keizer tied to pesticide

ALAN GUSTAFSON Statesman Journal

April 22, 2008

Test results link a rodent-killing pesticide to a large die-off of Canada cackling geese at Staats Lake in Keizer, officials said Monday.

Now, investigators are tracking pesticide sales in the Keizer area to determine where the restricted-use pesticide was applied and whether it was done legally.

Zinc phosphide is primarily used by farmers and golf course managers to control small rodents, such as voles, mice and ground squirrels, particularly in grass fields where rodents cause significant damage to crops, officials said. It is highly toxic to rodents, birds, fish and other wildlife. When zinc phosphide is ingested, it is converted by stomach acids to phosphene gas, which attacks the heart, kidney and liver. Death results from heart and kidney failure.

Recently, 67 dead geese were found at the private lake in Keizer.

Five of six samples taken from goose carcasses tested positive for zinc phosphide, according to results from Michigan State University's Center for Integrative Toxicology.

The lab results suggest that zinc phosphide was the primary cause of the mass bird deaths, said Dale Mitchell, assistant administrator of the pesticides division of the Oregon Department of Agriculture.

Classified as a restricted use pesticide, zinc phosphide can only be sold at licensed facilities, Mitchell said. He said the agency is working with local pesticide dealers to identify recent purchasers of products containing the material.

"We're in the process of gathering information on recent purchases, then we intend on interviewing parties within the general vicinity to try to get a feeling for the use patterns of the material," Mitchell said.

As it stands, officials said, it's not known whether misuse of the pesticide occurred.

"Number one, we want to make sure that the materials are being used according to label directions," Mitchell said. "And number two, if there is a misuse of the product, contrary to label instructions, then we need to communicate that to the parties."

If the Department of Agriculture identifies an unlawful use of the pesticide, the agency will take enforcement action, he said.

In the past, large die-offs of Canada geese occurred at Staats Lake in 2007, 2005, 2001 and 2000, newspaper reports indicate. Previous investigations linked bird fatalities to aspergillosis, a fungal infection of the lungs, and to pesticide contamination.

In 2005, Mitchell said, zinc phosphide was linked to bird deaths at Staats Lake and at a few other locations in the Willamette Valley.

### Bird deaths

Sixty-seven dead geese recently were found at Staats Lake in Keizer. The outbreak started April 11 and continued for several days. No dead geese have been found at the private lake since April 16, officials said.

"Our agency, working with state Fish and Wildlife and U.S. Fish and Wildlife, did extensive outreach and communication to the user community, parties that would be using zinc phosphide products, in regards to the lawful use of the materials," he said.

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